

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Cancelled).

Claim 2. (Currently Amended).

A process for producing a semiconductor wafer with a front surface and a back surface and an epitaxial layer of semiconducting material deposited on the front surface, wherein the process comprises the following process steps:

- (a) a stock removal polishing step as the only polishing step;
- (b) cleaning and drying of the semiconductor wafer;
- (c) pretreating of the front surface of the semiconductor wafer in a hydrogen atmosphere to which gaseous Hcl has been admixed at a temperature of from 950 to 1250 degrees Celsius in an epitaxy reactor, thereby removing from 0.01 to 0.2 μm of material from the surface of the semiconductor wafer at an etching rate of 0.01 to 0.1 $\mu\text{m}/\text{min}$; and
- (d) depositing of the epitaxial layer on the front surface of the pretreated semiconductor wafer.

Claim 3. (Original).

The process as claimed in claim 2, comprising
polishing the front surface and the back surface of the
semiconductor wafer simultaneously during the stock removal
polishing.

Claim 4. (Original).

The process as claimed in claim 2, comprising
polishing only the front surface of the semiconductor wafer
during the stock removal polishing.

Claim 5. (Original).

The process as claimed in claim 2, comprising
carrying out the pretreating referred to in step (c)
immediately before the epitaxial depositing in the epitaxy
reactor.

Claim 6. (Original).

The process as claimed in claim 2, comprising
treating the semiconductor wafer, in a first step of the
pretreating according to step (c), in a hydrogen atmosphere at a
temperature of from 950 to 1250 degrees Celsius.

Claim 7. (Canceled).

Claim 8. (Original).

The process as claimed in claim 2,
wherein the epitaxial layer deposited in step (d) has a
thickness of 0.3 μm to 10 μm and is deposited at a temperature of
from 600°C to 1250°C.

Claim 9. (Original).

The process as claimed in claim 2,
wherein the epitaxial layer deposited in step (d) is
rendered hydrophilic using an oxidizing gas.

Claim 10. (Original).

The process as claimed in claim 2,
wherein the epitaxial layer deposited in step (d) is
rendered hydrophilic by wet-chemical means.

Claim 11. (Original).

In a method for producing integrated semiconductor
components, the improvement which comprises
utilizing an epitaxially coated semiconductor wafer produced
by the process of claim 2 for producing said components.